



Atomic Absorption spectrophotometer



Features

- High-resolution grating optical system with 5-year warranty on optics
- Intelligent stray-light measurement with automatic correction
- Optical noise reduction with dynamic stray-light detection
- Internal lamp control technology for hollow cathode lamps
- Self-absorption background correction capability
- Automatic multi-element lamp adjustment system
- Modular gas path and electronic system design
- Automatic instrument self-testing system
- High sensitivity and stable analytical performance



KAAS-1800

Applications

- Environmental testing laboratories
- Pharmaceutical analysis
- Food safety laboratories
- Water quality testing
- Metallurgical analysis
- Research and academic laboratories

Uses

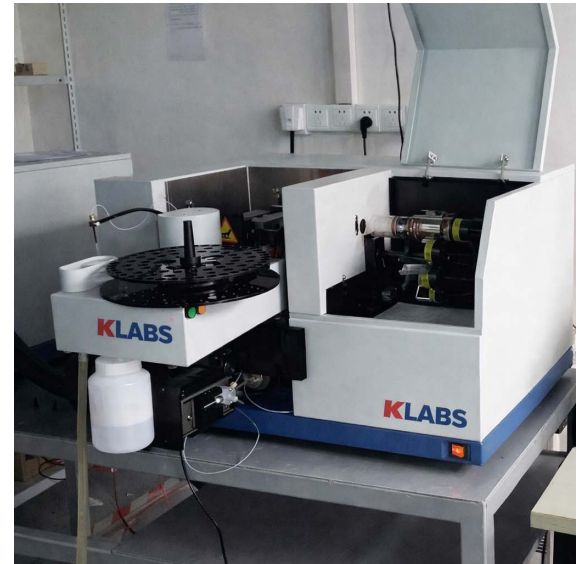
- Determination of trace metal elements
- Quantitative elemental analysis
- Environmental sample analysis
- Quality control testing

Description

The KLABS Atomic Absorption Spectrophotometer (Model: KAAS-1800) is a high-performance analytical instrument designed for accurate determination of metal elements in various samples. The instrument features a high-resolution grating optical system that ensures excellent optical performance and measurement precision.

The system incorporates advanced stray-light correction technology and automatic optical noise reduction to improve detection performance, linear range, and background correction. The integrated lamp control technology allows standard hollow cathode lamps to perform self-absorption background correction without affecting instrument stability.

The KAAS-1800 offers reliable operation, advanced automation, and modular design, making it suitable for environmental testing laboratories, pharmaceutical analysis, food safety laboratories, research institutes, and industrial quality control applications.



UPGRADABLE WITH

- Graphite Furnace
- Auto-Sampler for Graphite Furnace
- Hydride Generator
- Wide range of Hollow-Cathode Lamps (Single/Multi Element)available on request

TECHNICAL SPECIFICATIONS

Optical System	Instrument Type	Single Beam Reflection Achromatic Optics System
	Dispersion elements	Grating system 1800 line/mm characterization area 40mm 2 Scintillation wavelength 250nm
	Bandwidth	0.1, 0.2, 0.4, 0.7, 1.0, 2.0 nm (6-step automatic switching)
	WL Range	190-900
	WL Accuracy	±0.2
	WL Repeatability	±0.1 nm max
	Resolution	Min 3 lines (279.5 & 279.8 peak and Valley)
	HCL housing	Standard 4 lamp turret. (1 for measurement , 3 in warm-up mode) Option :- 6 Lamp / 8 Lamp Turret.
	Gas control	Automatic control & optimization (flow/pressure)
	Safety measures	Gas Leak check, prevention of gas release when flame dies out, prevention of flashback through pressure monitoring.
Photometric properties	Measurement	Aberration-corrected Czerny-Turner mounting
	Photometric Range	0-125%, -0.1-3.00A
	Static Baseline Drift	(Cu) +-0.003A/30min
	Dynamic Baseline Drift	(Cu) +-0.006A/30min
	Background Correction	High speed self-reversal (BGC-SR) method: High speed D2 lamp method (BGC-D2)
Flame and Atomization System	Characteristic Concentration	(Cu) 0.025 µg/ml max (GF)
	Detection limit	(Cu) 0.004 µg/ml max (GF)
	Precision	RSD =0.5%
	Burner	Air cooled Titanium
	Nebulizer	High-efficient Nebulizer
	Spray chamber	Anticorrosion material
	Safety measures	Flame fuel gas, power assisted gas abnormal pressure protection
Data Process	Test Manner	Flame , flame emission .
	Concentration	Standard curve, standard addition, interpolation
	Times of repetitive	Measurement 1-30 times, Average Value of A&C
	Report Print	Parameters, date result
Other	Dimension & Weight (Flame)	700×420×550 mm; 103 kg(approx.)
	Power (Main unit with (Flame)	AC 220 V ±10%, 50 Hz without sharp fluctuations.
	Working Temperature range	10~30°C
	Working Humidity range	40%~85%

